



# Launch Mission Execution Forecast

**Mission:** Falcon 9 COSMO-SkyMed

**Issued:** 27 Jan 2022 / 1800L (2300Z)

**Valid:** 28 Jan 2022 / 1806 – 1817L (2306 – 2317Z)



**Forecast Discussion:** Low pressure which brought showers to the Spaceport today will gradually shift out into the Atlantic overnight into tomorrow. The extent of showers tomorrow will be less, however another system approaching from the northwest will bring the potential for layered thick clouds to the area by late afternoon. Thus, the main weather concerns for tomorrow are the Thick Cloud Rule and cumulus clouds associated with isolated showers.

| Launch Day   | Probability of Violating Weather Constraints |   |           |           |           |                                  |
|--|--|---|-----------|-----------|-----------|----------------------------------|
|  | 30%  | Primary Concerns: Thick Cloud Layers Rule, Cumulus Cloud Rule |           |           |           |                                  |
|  | Weather Conditions                           |   |           |           |           | Additional Risk Criteria         |
|  | Weather/Visibility: Isol Showers / 7 mi.     | Clouds  |           |           |           | Upper-Level Wind Shear: Moderate |
|  | Temp/Humidity: 57°F / 82%                    | Type  | Coverage  | Base (ft) | Tops (ft) | Booster Recovery Weather: Low    |
| Liftoff Winds (200'): 310° 15 - 20 mph   |  | Cumulus   | Scattered | 3,000     | 9,000     | Solar Activity: Low              |
|  |  | Altostratus   | Broken    | 16,000    | 24,000    |                                  |
| <b>Note:</b> The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity. |  |   |           |           |           |                                  |
| Next Forecast Will Be Issued   |  | As Required   |           |           |           |                                  |